MARRI LAXMAN REDDY GROUP OF INSTITUTIONS

PharmaScout

MLRIP's officially e-mag

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Marri Laxman Reddy Institute of Pharmacy
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Dundigal -Gandimaisamma (V)&(M)
Medchal Dt, Hyderabad
Telangana State - 500043

"*To succeed in your mission you must have a single minded devotion to your goal.*"

– Dr. A. P. J. Abdul Kalam

INSIDE THIS:

Sri Marri Laxman Reddy

Chairman

MLR Group of Institutions

He has been in the field of education for more than three decades. He is an exemplary personality and extraordinary visionary and a constant inspiration to the younger generation. He is a veteran athlete of international repute. He emphasizes the importance of physical health for academics and overall personality development.

Sri Marri Rajshekar Reddy

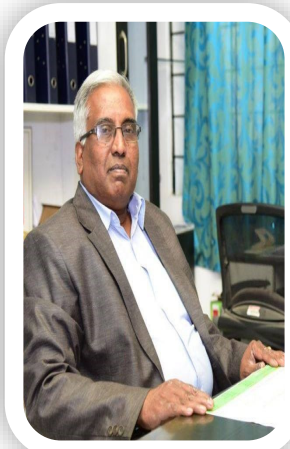
Founder-Secretary

MLR Group of Institutions

He is a person of great acumen and remarkable abilities. He is a dynamic leader and strives hard to make every dream a reality. He is an initiator, innovator, and executor of novel plans for the progress of the institutions. He is the motivational and driving force of all the activities in the campus.

PRINCIPAL'S DESK

A Tale of Inspiration:



It may not necessarily always come from a celebrity. Even an ordinary person may inspire and influence many in one or other way. The real time experiences of them are often exciting and stimulating.

I will tell about a person who is in fact a student of mine. She created a record of that sort in Gujarat Technological University, Ahmedabad by scoring SGPA of 10 out of 10 for her dissertation in M. Pharm. When she approached for a job in Pharma Company in her hometown, she was told there was no vacancy. But when their conversation slowly led to an unexpected interview, she was offered a job and asked her to report immediately because of her depth in the subject.

Her start up idea was declared the 4th best with a cash prize of 1 Lakh among 650 in the event conducted by GTU and felicitated by the Vice chancellor and consulates of France and Britain. She is launching an ayurvedic formulation for diabetes soon. Sure I hope this story will surely stimulate us.

Dr. K. S. Murali Krishna
Professor & Principal
MLR Institute of Pharmacy

A great person said somewhere: ***Success gives you the positive addiction than any other.... Is it not?***

About MLRIP

VISION

To be an educational institute of par excellence and produce competent pharmacy professionals to serve the community through research and the ever-increasing needs of Industry.

MISSION

1. Imparting quality education and innovative research for various career opportunities.
2. Creating conducive academic environment to produce competent pharmacy professionals.
3. Indoctrination of students adorned with high human values and make them aware of their responsibility as health care professionals.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO's)

PEO 1: To produce graduates with sound theoretical knowledge and technical skills required for their career opportunities in various domains.
PEO 2: To incite the students towards research and to address the challenges with their innovative contributions for the benefit of the mankind.
PEO 3: To instill the essence of professionalism, ethical commitment to become a health care professional with sound integrity and adherence to the core human values in the service of the society.

PROGRAMME OUTCOMES

1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

2. **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

3. **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

4. **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

5. **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.

6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g., health care professionals, promoters of health, educators, managers, employers, employees).

7. **Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

8. **Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

9. **The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

10. **Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

11. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

DENGVAXIA (Dengue, tetravalent vaccine, Live)

Dengue is a mosquito-borne viral infection causing flu-like illness, and occasionally develops into a potentially lethal complication called severe dengue. The incidence of dengue has grown dramatically around the world in recent decades. The Centers for Disease Control and Prevention (CDC) estimate that 400 million people are infected each year.

There is no specific treatment for dengue fever. The best method of prevention is to avoid mosquito bites. The development of a vaccine for dengue is on for decades and recently it is reported that a vaccine has been developed.

Proper Name: Dengue Tetravalent Vaccine, Live

Tradename: DENGVAXIA

Manufacturer: Sanofi Paateur Inc.

INDICATIONS AND USAGE:

Dengvaxia is a tetravalent live vaccine indicated for the prevention of dengue disease caused by dengue virus serotypes 1, 2, 3 and 4. It is approved for use in individuals 9 to 16 years of age with laboratory-confirmed previous dengue infection and living in endemic areas.

Limitations of use:

- Dengvaxia is not approved for use in individuals not previously infected by any dengue virus serotype or for whom this information is unknown. Previous dengue infection can be assessed through a medical record of a previous laboratory-confirmed dengue infection or through serological testing prior to vaccination.
- The safety and effectiveness of Dengvaxia have not been established in individuals living in dengue non-endemic areas who travel to dengue endemic areas.

MECHANISM OF ACTION:

Following administration, Dengvaxia elicits dengue-specific immune responses against these four dengue virus serotypes. However, the exact mechanism of protection has not been determined.

DOSAGE AND ADMINISTRATION:

For subcutaneous use only.

Dose: Three doses (0.5 mL each) 6 months apart (at month 0, 6, and 12).

Administration:

After reconstitution, withdraw 0.5 mL of DENGVAXIA and administer subcutaneously immediately or store refrigerated at 2ºC to 8ºC (36ºF to 46ºF) and use within 30 minutes. Do not administer DENGVAXIA by intramuscular injection.

DOSAGE FORMS AND STRENGTHS:

DENGVAXIA is a suspension for injection (supplied as a lyophilized powder to be reconstituted with the supplied diluent, 0.4% NaCl). A single dose, after reconstitution, is 0.5 mL.

SIDE EFFECTS:

Injection site reactions:

Pain, erythema and swelling.

Systemic adverse reactions:

Asthenia, Fever, Headache, Malaise and Myalgia.

CONTRAINDICATIONS:

A history of severe allergic reaction to a previous dose of DENGVAXIA or to any component of DENGVAXIA.

Immunocompromised individuals.

WARNINGS AND PRECAUTIONS:

- Increased Risk of Severe Dengue Disease Following DENGVAXIA in Persons not Previously Infected with Dengue Virus.
- Management of Acute Allergic Reactions.
- Limitations of Vaccine Effectiveness.
- Syncope.

DRUG INTERACTIONS:

Concomitant Administration with Other Vaccines:

Data are not available to establish the safety and immunogenicity of concomitant administration of DENGVAXIA with recommended adolescent vaccines.

Immunosuppressive Treatments:

Immunosuppressive therapies, including irradiation, antimetabolites, alkylating agents, cytotoxic drugs and corticosteroids (used in greater than physiologic doses), may reduce the immune response to DENGVAXIA.

Drug/Laboratory Test Interactions:

False negative tuberculin purified protein derivative (PPD) test results may occur within 1 month following vaccination with DENGVAXIA.

Dr. Gabriela Keerthana Gondhi, Pharm. D, Asst. Professor / Shruthi Gatla, Pharm. D VI year

HEALTH DAYS TO REMEMBER

AUGUST

1st – 7th

World Breastfeeding Week

SEPTEMBER

1st – 7th: National Nutrition Week
10th: World Suicide Prevention Day
17th: World Patient Safety Day
21st: World Alzheimer's Day
25th : World Pharmacist Day
28th: World Rabies Day
29th: World Heart Day

DECEMBER

1st- World AIDS Day

NOVEMBER

12th -18th : World Antibiotic Awareness Week
14th : World Diabetes Day
17th: National Epilepsy Day

OCTOBER

Breast Cancer Awareness Month
2nd: National Anti-Drug Addiction Day
10th : World Mental Health Day
11th: World Obesity Day
12th : World Arthritis Day
15th : World Handwashing Day
20th : World Osteoporosis Day
21st :World Iodine Deficiency Day
24th : World Polio Day

Dr. Kainat Panjwani, Pharm. D, Asst. Professor / Alekhya Jakkoju, Pharm. D VI year.

Our student, *V. SAI VAISHNAVI* of Pharm. D VI year, presented a paper at **APP 8th annual convention**, organized by **JSS College of Pharmacy, Mysore** on 24th & 25th july 2019

Out of 300 research papers she was awarded with **1st Prize for best e-poster** in Department of Pharmacy Practice.

Ms. Niveditha Ghosh of B. Pharm III year *represented JNTUH in South Zone Inter University Hand Ball tournament at Chennai*

Our student, *V. SAI VAISHNAVI* of Pharm. D VI year, presented a paper at *70th Indian Pharmaceutical Congress*, held from 21st to 23rd December 2018 with a theme *"Pharma Vision 2030"* at *New Delhi* and selected as one among the three finalists in the oral presentation category.

Student's corner

CLINICAL PHARMACY PRACTICE IN INDIA

P. UNNATI, PHARM.D INTERN

It's been 10 plus years since the inception of the degree doctor of pharmacy (Pharm D) in India and the role of clinical pharmacists is still underutilized, not deemed important by either the community or other health care providers. Although on the bright side not only has our drug therapy expertise - with potentiality of optimizing medication use and positive health outcomes, been brought to light by national controversies but it has also led the government of India officially introduced the role of clinical pharmacist in the Indian healthcare system in august 2019. In the backdrop, the need for clinical pharmacists as a part of multidisciplinary team is emerging especially in country like ours where there's one government doctor for every 11,528 people, one nurse for every 483 people and 50,00,000 patients die annual due to medication errors.

STUDENTS' PERSPECTIVE: A study revealed that

- About 85% of the students studying pharm D agreed that Pharm D professionals can minimize medication errors, maximize cost-effectiveness and improve patient outcomes.
- 61% of the students claimed that the profession is not valued in the way it deserves.
- 82.4% students suggested that there should be an enhanced inter-professional relationship between Clinical Pharmacist and a physician for better patientcare.
- 90% of them agreed that clinical pharmacist should be appointed at the PHC (Public Health Centre) and CHC (Community Health Centre) at villages and rural areas.
- Only one-fourth i.e. 26.5% of the students agreed that doctors and other healthcare staff will accept the interventions made by clinical pharmacists.
- 85% of the students showed a positive inclination towards Pharm D students and academic staff attending international conferences abroad to broaden their vision.
- 72.1% students want institutions to invest the academic funds in research related activities which can assist in creating young research scholars.
- 91% students claimed towards need for licensing examination for registration as a pharmacist in India like in other countries.

CLERKSHIP AND INTERNSHIP:

Students in pharm D spend two years training in a hospital gaining practical exposure as well as offering services like:

- ♦ Patient medication history interview.
- ♦ Optimization of maximum therapeutic efficacy of drugs by:

1. Adverse drug reactions monitoring.
2. Medication Reconciliation.
3. patient counseling.

- ♦ Providing drug information to other healthcare professionals.

The exposure they gain and the contributions they make from above are enough to vouch for their clinical skills however, several research studies making a clinical pharmacist's role concrete with progressive health outcomes as results. Clinical pharmacists were making significant contributions in the fields like oncology, non-communicable diseases like diabetes, psychiatry, drug information centres and pharmacovigilance.

IN TYPE – II DIABETES:

The pharmaceutical care provided to patients in a study through counselling and teaching, by clinical pharmacist in a clinical setting showed statistically significant positive clinical outcomes in patients with type 2 diabetes mellitus. Findings showed improvement in terms of FBS (fasting blood sugar), PPBS (post prandial blood sugar), Systolic and Diastolic blood pressure post intervention in the study.

ONCOLOGY:

Cancer is a kind of disease which requires vigorous chemotherapy with many potential definite side effects, ADRs and therapeutic failure. A physician oncologist sure cannot assess, monitor, minimize each ADR weight them with respect to the patient in every ward round.

P.T.O

Student's corner

Physicians can neither call for therapeutic team meeting upon each and every case. Therefore, a clinical pharmacist is the best fit to bridge the gap in oncology.

A study focused on all the clinical problems encountered during cancer therapy in a particular hospital and later used clinical pharmacist intervention to tackle them. The findings included:

- 1279 ADRs were reported in 1133 patients from a cohort of 1328 patients.
- A total of 1359 medication-related problems were identified from 2120 medication orders reviewed of 1362patients followed during the study period.

PHARMACOVIGILANCE:

- India (PvPI) was established in July, 2010 with an intention to improve patient safety and welfare in Indian population by monitoring drug safety and thereby reducing the risk associated with the use of medicines.
- Research in this area in India could be wide-ranging considering research done by Clinical Pharmacists in Pharmacy Practice, other healthcare professionals and pharmaceutical industry.
- Nearly all studies were carried out in a single centre. There is an important need for networking of Pharmacovigilance researchers towards multicentre studies with harmonized methodology. this particular need of the hour for pharmacovigilance sector in India can be perfectly fulfilled by the clinical pharmacists.

DRUG INFORMATION CENTRES (DICs):

- DICs are defined as operational units that provide up-to-date scientific and technical information on medicines in an objective and timely manner. National Poisons Information Centre at AIIMS, New Delhi, established in 1995 in the Department of Pharmacology provides round-the-clock information on poisoning, drug reactions, and analytical services on an emergency basis to help in diagnosis and management. It also provides training to residents posted in the centre.
- DIC in South India reported that questions most commonly asked were regarding dosage and administration (27%), adverse reactions (24%), and drug therapy (15%). Queries were also asked on many occasions for other purposes such as availability/cost, drug interactions, pharmacokinetics, pharmacodynamics, pregnancy and lactation, indication, content, contraindication, generics, drug pro le, and poisoning – all of which falls into a clinical pharmacist's expertise.
- Therefore, it's safe to say that Pharm.D graduates can be a perfect fit for this line of work considering the current lack of trained technical personnel for DICs provided sufficient DICs are properly established with all resources.

CHALLENGES:

1. Role of pharmacist in providing patient care as a part of multidisciplinary team is emerging yet training of pharmacists as specialist pharmacists (like oncology, cardiology, etc.) is a long way to go.
2. Introducing drug information residency/fellowships for training of postgraduate students should be followed in India to overcome the deficiency of trained workforce and also provide round-the-clock services in the DICs – all of which require allocation of human, infrastructural and financial resources.

CONCLUSION:

Clinical pharmacy practice in India is yet to grow. To make place for the practice in daily healthcare system there need to be some radical shift in not only hospital policies and resources but also the national healthcare, public health and drug policies in general. However, with the amount scientific evidence showing positive health outcomes the value and acceptability of the practice shall no longer remain questionable. While the patient safety practice remains out of jurisdiction there are drug information centres and pharmacovigilance sector that could readily absorbing the professionals.

Faculty achievements

Dr. Nalini Kanta Sahoo was awarded as ***best professor*** out of 1200 nominations for his outstanding performance in teaching techniques at ***Ideal Teaching Award Programme (ITAP) 2018 awards*** by Tutor Pride.

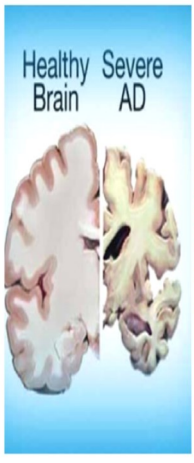
Dr. Arunabha Mallik, Won ***Best Research Paper Presenter Award*** in ***288th International Conference on Pharma and Food (ICPAF)*** held on 18th to 19th August 2018 at ***Langkawi, Malaysia*** on the topic “Evaluation of RBC membrane stabilization and immunostimulatory effect of *Sesbania grandiflora* flowers extract”.

Maddukuri sravya won ***First prize*** for her work on ***“Screening of stabilizers in azithromycin nanosuspensions”*** at ***Indo - Malaysian conference***, with the theme "Advances and current scenario of pharmaceutical sciences" held at Malla Reddy College of Pharmacy on 9th March, 2019.

Snippets from Principal

HANS INDIA (All Editions)

Alzheimer's disease: an overview



Many of you might have watched a commercial involving an elderly couple. The old man searches for his pair of glasses which are on his head and the old woman brings it down. This is the true reflection of many aged persons' problems. They often come back to their homes by cabs leaving their own cars somewhere. They even forget the name of their dear ones like spouse, children or grand children and shockingly fail to recognise them.

Shastipurty is an important event but many elders do not like to celebrate because of certain apprehensions. Old age is really that much painful?

Not definitely. I recall Somerset Maugham' quote' Old age has its pleasures, which, though different, are not less than the pleasures of youth".

One can relish their post retirement life without becoming burden to anyone.

That age is enjoyable provided your health supports you. But, many disorders creep in and many diseases invade on. One of them is Alzheimer's disease (AD) named after Dr Alois Alzheimer.

AD is now recognised as a major type of Dementia. The term 'Dementia' refers to loss of memory and other mental abilities severe enough to interfere with daily life; AD is a progressive form of disease as symptoms of dementia gradually worsen.

Statistics reveal that more than 5 million Americans are suffering from AD and 11 percent of them are between the age of 65 and 85 and one-third of them are above 85. It also impacts over 15 million family members, friends and caregivers. In our country, 1.6 million are suffering.

Risk factors of AD

- Advancing Age
- Genetics
- Combined effect of foods rich in sugar or fats and aging
- An excessive daytime drowsiness and sleep
- Lack of sleep, poor quality and disturbed sleep (common among older adults due to worries, interactions or side effects of medication, or certain medical conditions)
- Excess alcohol may retard the brain's natural ability to clear amyloid plaques

Symptoms

AD frequently goes unnoticed in early years. Any noticed signs are attributed to aging. The prominent symptoms in most of Alzheimer's cases include difficulty in recalling recent events, long-term memory loss, trouble with communication, confusion and slow but gradual loss of bodily functions.

The changes in the brain

Nearly 100 billion nerve cells (neurons) present in Human brain. They transmit messages by forming communication networks with other neurons.

The failure of neurons and loss of connections between them happen in AD. The role of plaques and tangles is now well recognized. Plaques are deposits of a protein fragment called beta-amyloid in the spaces between neurons. Tangles are twisted fibers of 'tau with in cell.

Their formation occurs in normal ageing also but the number is more in AD. The development starts in the areas concerned with memory which gradually spreads to other regions.

The initial damage occurs in the hippocampus, concerned with formation of new memories and associated with learning and emotions.

Additional parts of the brain are affected due to the death of more neurons, leading to shrinkage. By the final stage of AD, the damage is so widespread that shrinkage of brain tissue becomes significant.

Treatment and management

Presently there is no cure but often Cholinesterase inhibitors like glutamine, donepezil are prescribed in mild to moderate AD. Many herbs reported as Medha Rasayans or brain tonics in Ayurveda might be beneficial. Research is on for an effective therapy.

Alternative Alzheimer's treatment or Non-drug strategy.

A healthy elderly can delay mental degeneration by trying n things or learning new skills. Ex exercises like puzzles, crosswo and mental activity games prov mental stimulation and physi exercise enhances blood flow to brain. Nutritious food rich omega-3 fatty acids, vitamins E and C along with folate, seleni is beneficial.

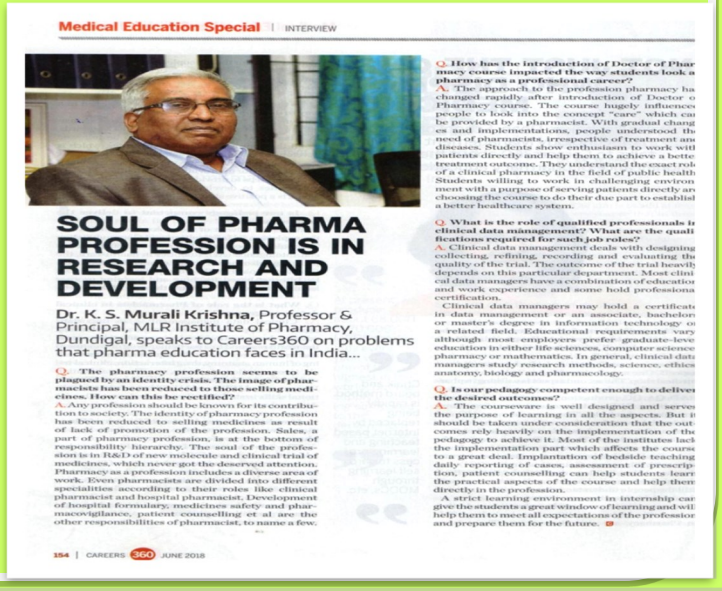
Caring for an Alzheimer's Patient

In early stages care can be p vided at home. As the disease p gresses, professional assistance often essential for psychological well as physical support. Provid basic necessities and spendi some time with them is necessa

To conclude, Old age the cro of life our play's last act. Theref what we should have with us i little compassion towards the e ers as everyone will become old less it was a premature end.

Dr K S Murali Krish
Professor & Princip
MLR Institute of Pharma
Hyderab

Career 360º



Medical Education Special | INTERVIEW

SOUL OF PHARMA PROFESSION IS IN RESEARCH AND DEVELOPMENT

Dr. K. S. Murali Krishna, Professor & Principal, MLR Institute of Pharmacy, Dundigal, speaks to Careers360 on problems that pharma education faces in India...

Q. The pharmacy profession seems to be plagued by an identity crisis. The image of pharmacists has been reduced to those selling medicines. How can this be rectified?

A. Any profession should be known for its contribution to society. The identity of pharmacy profession has been reduced to selling medicines as result of lack of promotion of the profession. Sales, a part of pharmacy profession, is at the bottom of responsibility hierarchy. The soul of the profession is in R&D of new molecule and clinical trial of medicines, which never got the deserved attention. Pharmacy as a profession includes a diverse area of work. Even pharmacists are divided into different specialities according to their roles like clinical pharmacist and hospital pharmacist. Development of hospital formulary, medicines safety and pharmacovigilance, patient counselling et al are the other responsibilities of pharmacist, to name a few.

Q. How has the introduction of Doctor of Pharmacy course impacted the way students look at pharmacy as a professional career?

A. The approach to the profession pharmacy has changed rapidly after introduction of Doctor of Pharmacy course. The course hugely influences people to look into the concept "care" which can be provided by a pharmacist. With gradual changes and implementations, people understood the need of pharmacists, irrespective of treatment and diseases. Students show enthusiasm to work with patients directly and help them to achieve a better treatment outcome. They understand the exact role of a clinical pharmacy in the field of public health. Students willing to work in challenging environment with a purpose of serving patients directly are choosing the course to do their due part to establish a better healthcare system.

Q. What is the role of qualified professionals in clinical data management? What are the qualifications required for such job roles?

A. Clinical data management deals with designing, collecting, refining, recording and evaluating the quality of the trial. The outcome of the trial heavily depends on this particular department. Most clinical data managers have a combination of education and work experience and some hold professional certification.

Clinical data managers may hold a certificate in data management or an associate, bachelor or master's degree in information technology or a related field. Educational requirements vary although most employers prefer graduate-level education in either life sciences, computer science, pharmacy or mathematics. In general, clinical data managers study research methods, science, ethics, anatomy, biology and pharmacology.

Q. Is our pedagogy competent enough to deliver the desired outcomes?

A. The courseware is well designed and serves the purpose of learning in all the aspects. But it should be taken under consideration that the outcomes rely heavily on the implementation of the pedagogy to achieve it. Most of the institutes lack the implementation part which affects the courses to a great deal. Implantation of bedside teaching, daily reporting of cases, assessment of prescription, patient counselling can help students learn the practical aspects of the course and help them directly in the profession.

A strict learning environment in internships can give the students a great window of learning and will help them to meet all expectations of the profession and prepare them for the future.

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Indigenous Space

"Phytotherapeutic Approaches for the Treatment of Huntington's Disease"

Huntington disease (HD) is a rare neurodegenerative disorder of the central nervous system characterized by unwanted choreatic movements, behavioural and psychiatric disturbances, and dementia. Most people with Huntington's disease develop signs and symptoms in their 30s or 40s. But the disease may emerge earlier or later in life. When the disease develops before age 20, the condition is called juvenile Huntington's disease.

HD currently occurs in many different countries and ethnic groups across the globe. It has a worldwide prevalence of five to eight per 100,000 people with no gender predominance. Europe and countries of European origin have utmost frequencies of HD. In the USA, estimates of the prevalence of HD range from 4.1 to 8.4 per 100,000 people. In India, pervasiveness of HD is higher and is closer to that occurs in Western Europe.

The defective gene identified in 1993 causes virtually all Huntington's disease. The Huntington gene defect involves extra repeats of one specific chemical code in one small section of chromosome 4. The normal huntingtin gene includes 17 to 20 repetitions of this code among its total of more than 3,100 codes. The defect that causes Huntington's disease includes 40 or more repeats. Genetic tests for Huntington's disease measure the number of repeats present in an individual's huntingtin protein gene.

Scientists don't yet understand the normal function of huntingtin protein or how a few dozen extra repeats in its genetic blueprint lead to the devastating symptoms of Huntington's disease. Researchers are eager to solve these mysteries to find the answer to Huntington's. These solutions also may offer important insights into a wide range of other brain disorders, including Alzheimer's, Parkinson's disease and amyotrophic lateral sclerosis (ALS).

Various hypotheses, including molecular genetics, oxidative stress, excitotoxicity, metabolic dysfunction, and mitochondrial impairment have been proposed to explain the pathogenesis of neuronal dysfunction and cell death. Despite no treatment is available to fully stop the progression of the disease, there are treatments available to help control the chorea.

Nature is the best combinatorial chemist and possibly has answers to all diseases of mankind. Many of the thousands of plant species growing throughout the world have a direct pharmacological action on the body. Natural compounds with the effects of anti-oxidant, anti-inflammation, calcium antagonization, anti-apoptosis, and neurofunctional regulation exhibit preventive or therapeutic effects on various neurodegenerative diseases. Some of the plants and phytochemicals that have shown efficacy against 3-NP-induced neuronal impairment, a widely used animal model for HD, are discussed below:

S. NO	BOTANICAL NAME	FAMILY	PART USED	PHYTOCONSTITUTES
1	*Ginkgo biloba*	Ginkgoaceae	Leaves	Ginkgolide A-C, Ginkgolide J-M Quercetin, Kaempferol
2	*Withania somnifera*	Solanaceae	Roots	Sitoindosides VII-X, Withaferin A
3	*Curcuma longa*	Zingiberaceae	Rhizomes	Desmethoxycurcumin Bis-desmethoxycurcumin
4	*Panax ginseng*	Araliaceae	Roots	Ginsenoside, Panaxadiols, Panaxatriols
5	*Centella asiatica*	Umbelliferae	Seeds	Asiaticoside, Asiatic acid, Madecassoside, Madecassic acid
6	*Tripterygium wilfordii*	Celastraceae	Flowers	Celastrol

Dr. Arunabha Mallik, *M. Pharm, Ph.D*, ***Professor /Adiraju Usha Lalitha, B. Pharm IV year***

NSS Activities

Pharmacist's Day ralley in Dundigal village

ఎమ్మెల్లార్ఐటిఎంలో మెగా రక్తదాన శిబిరం

150 యూనిట్లు రక్తాన్ని దానం చేసిన ఎమ్మెల్లార్ విద్యార్థులు

మండిగల్, మార్చి 19 ప్రభాతవార్త : నగరశివారు కుత్బుల్లాపూర్ నియోజకవర్గం, దుండిగల్ గ్రామ పరిధిలోని మల్లి లక్ష్మణ్‌రెడ్డి ఇన్‌స్టిట్యూట్ ఆఫ్ టెక్నాలజీ(ఎమ్మెల్లార్ఐటిఎం), మల్లి లక్ష్మణ్‌రెడ్డి ఫార్మసీ(ఎమ్మెల్లార్ఫా) కళాశాలో ఎస్ఎస్ఎస్, ఇఎస్ఐ వైద్యశాలల ఆధ్వర్యంలో మంగళవారం మెగా రక్తదాన శిబిరాన్ని నిర్వహించారు. ఈరక్తదాన శిబిరంలో విద్యార్థులు ఉత్సాహంగా పాల్గొని 150యూనిట్ల రక్తాన్ని దానం చేశారు. ఈసందర్భంగా ఎమ్మెల్లార్ విద్యాసంస్థల కార్యదర్శి ఎమ్మెల్లార్ రాజశేఖర్‌రెడ్డి రక్తదాన శిబిరాన్ని సందర్శించి విద్యార్థులను అభినందించడంతో పాటు పండ్లు పంపిణీ చేశారు. ప్రిన్సిపాల్ డా.కె.వి.రెడ్డి మాట్లాడుతూ ఇటువంటి కార్యక్రమాలు నిర్వహించడం వ్యార్థులలో మానసిక ఉత్తేజం కలుగడంతో సామాజిక సేవలపై ఆసక్తి పెంపొందుతుందన్నారు. ఇంత భారీ కార్యక్రమాన్ని విజయవంతంగా నిర్వహించిన ఎస్ఎస్ఎస్ అధికారి జి.విజయసింహాగౌడ్, ఇఎస్ఐ వైద్యశాలల ప్రత్యేకంగా అభినందించారు. ఎమ్మెల్లార్ఫా ప్రిన్సిపాల్ సురభీకృష్ణ మాట్లాడుతూ అన్ని దానాల కంటే రక్తదానం గొప్పదని తెలిపారు. 'దానం ద్వారా మరోకు ప్రాణాలను కాపాడగలమని ధైర్యాన్నారు. 'ంలో కళాశాల డైరెక్టర్ కోటయ్య, ఇఎస్ఐ వైద్యశాల డైరెక్టర్ డా.వినల్, డా.శాంతి, సిబ్బంది, అధ్యాపకులు, విద్యార్థులు పాల్గొనా

రక్తదానం చేసిన విద్యార్థులకు పండ్లు పంపిణీ చేస్తున్న ఎమ్మెల్లార్ రాజశేఖర్‌రెడ్డి

Free **Health Camp** by MLR Group of Institutions at all adopted villages under UBA Scheme - Students of MLRIP have actively participated in serving the basic health aides, also **patient counselling** has been done which created comfortable environment for the people around.

The medical camp included check up by four specialists from four departments of **Ophthalmology, Orthopaedics, General medicine and Dentistry from Malla Reddy Multispecialty hospital**.

Free Hepatitis B Vaccination programme has been conducted in **Government Schools (ZPHS & MPPS) of NUTHANKAL, GOWDAVALLY, SRIRANGAVARAM** villages, Medchal, Malkajgiri District, Telangana.

Confluence Model United Nations 2019 (MUN)

Confluence Model United Nations 2019 was held from ***February 1st to 3rd, 2019*** at the Marri Laxman Reddy Institute of Technology, Management and Pharmacy (MLRITM and MLRIP). The three-day conference witnessed the participation of ***130 students from across India*** as delegates to discuss, deliberate and debate on agenda of international importance from the point of view of diplomats of various nations.

సదస్సులో మాట్లాడుతున్న రాజశేఖర్‌రెడ్డి

సదస్సులో పాల్గొన్న పాఠశాల విద్యార్థులు

ఉపాధ్యాయులకి జ్ఞాపిక అందజేస్తున్న రాజశేఖర్‌రెడ్డి

Placements

Bioclinica

Hinduja Global Solutions (HCG)

Hetero Labs

Omics International

S. NO	COMPANY	JOB PROFILE	COURSE	NO. OF STUDENTS PLACED
01	Bioclinica	Drug Safety Associate	B. Pharm	09
02	OMICS International	Analyst	B. Pharm	06
03	DIVI's Laboratories	Production	B. Pharm	05
04	Hinduja Global Solutions	Trainee Consultant	B. Pharm	17
05	Hetero Labs	QC/QA	B. Pharm	07
06	Doctus Software Solutions	Review Analyst	B. Pharm	09
07	Optimus Group	Production/QC/QA	B. Pharm	02
08	Bioclinica	Drug Safety Associate	Pharm. D	07
09	Palamuru Bioscience	Pre-Clinical Trial Analyst	Pharm. D	03
10	Cygnus Institute of Gasteroen-terology	Clinical Pharmacist	Pharm. D	01